Carner 3 1/8/13 47 State of North Carolina Department of Environment, Health, and Natural Resources Division of Solid Waste Management P.O. Box 27687 · Raleigh, North Carolina 27611-7687 James G. Martin, Governor William L. Meyer William W. Cobey, Jr., Secretary Director March 1, 1990 Mr. Lloyd Cook 115 South William Street Goldsboro, North Carolina 27530 The Need To Upgrade The Ground-water Monitoring System For The Wayne County Landfill (Permit #96-01) Dear Mr. Cook, The recent inspection of the ground-water monitoring wells at the Wayne County Landfill revealed some problems with the existing monitoring system. The Solid Waste Section is presently in the process of reviewing the well construction records and evaluating the design and condition of the monitoring wells at all North Carolina landfill facilities. Monitoring systems that are found to have problems will need to be upgraded in order to bring them into compliance with current design standards. The well records for this facility are incomplete. However, it appears, based upon the well construction data available and visual observations in the field, that the existing wells are converted piezometers rather than properly constructed monitoring wells. existing wells do not conform with current design standards. In addition to the problems associated with the original design of the wells, the existing wells have some specific problems that would also make upgrading the monitoring system necessary. One well has an obstruction that prevents the well from being sampled. Another well exhibits an artesian effect that indicates a problem with well design...the water is overflowing the inner casing and then draining through the outer casing. The outer casing of this well is also very rusted. Also there is a need to establish a true upgradient well in order to gather background water quality data. Therefore, even if the old wells had been properly constructed, it would be necessary to replace several of the wells at this time.

Page 2 For the reasons stated above, the Solid Waste Section will require that as one of the conditions of the amendment of the Sanitary Landfill Permit to allow a vertical expansion, Wayne County will need to upgrade the ground-water monitoring system to bring it into compliance with current standards. The ground-water monitoring system should be designed and constructed in a manner consistent with the "North Carolina Water Quality Monitoring Guidance Document For Solid Waste Facilities". A ground-water monitoring plan should be submitted to our office for approval prior to well installation. If you have any questions or comments please contact our office at (919) 733-0692. Sincerely, Bolby Lity Bobby Lutfy Hydrogeologist Solid Waste Section Attachments cc: Terry Dover Suzanne Molloy Bill Morris Municipal Engineering Services